

## **PRIVILEGED** SESSION MANAGER

### Gain Full Control Over Your Sessions

In any given IT and **Network Infrastructure**, there are **thousands of servers / devices and thousands of users** (employees, contractors, etc.) who connect to them on a daily basis.

So, there are tens of thousands of connections established between users and **servers/devices** every day, which is very complex and probably unmanageable from a **security point** of view. Not every connection (between user and device/servers) is at the same level of importance. For instance, there are users (employees) which you trust to connect to servers/devices that do not manage **critical** enterprise assets. For such **connection** types it may be enough to just log which user connected to which device/server. However, some connections are extremely sensitive, like **3rd party technical support workers** who access the most critical network/IT resources; in such cases, you want to ensure that you have **"full visibility"** and **"full control"** during such connections.



#### **Problems and challenges without a central session management solution**

- ▶ **Complexity of access management** for hundreds of users connecting to thousands of systems
- ▶ **Lack of central access control** point for critical systems
- ▶ Granting users **more privileges** than they need
- ▶ No or **minimal accountability** for privileged accounts
- ▶ Lateral movement and **spread of malware** to critical systems
- ▶ Lack of data and reports for **regulatory compliance** and **audits**
- ▶ Unsecure **3rd party** remote access

#### **Single Connect Privileged Session Manager is the solution...**

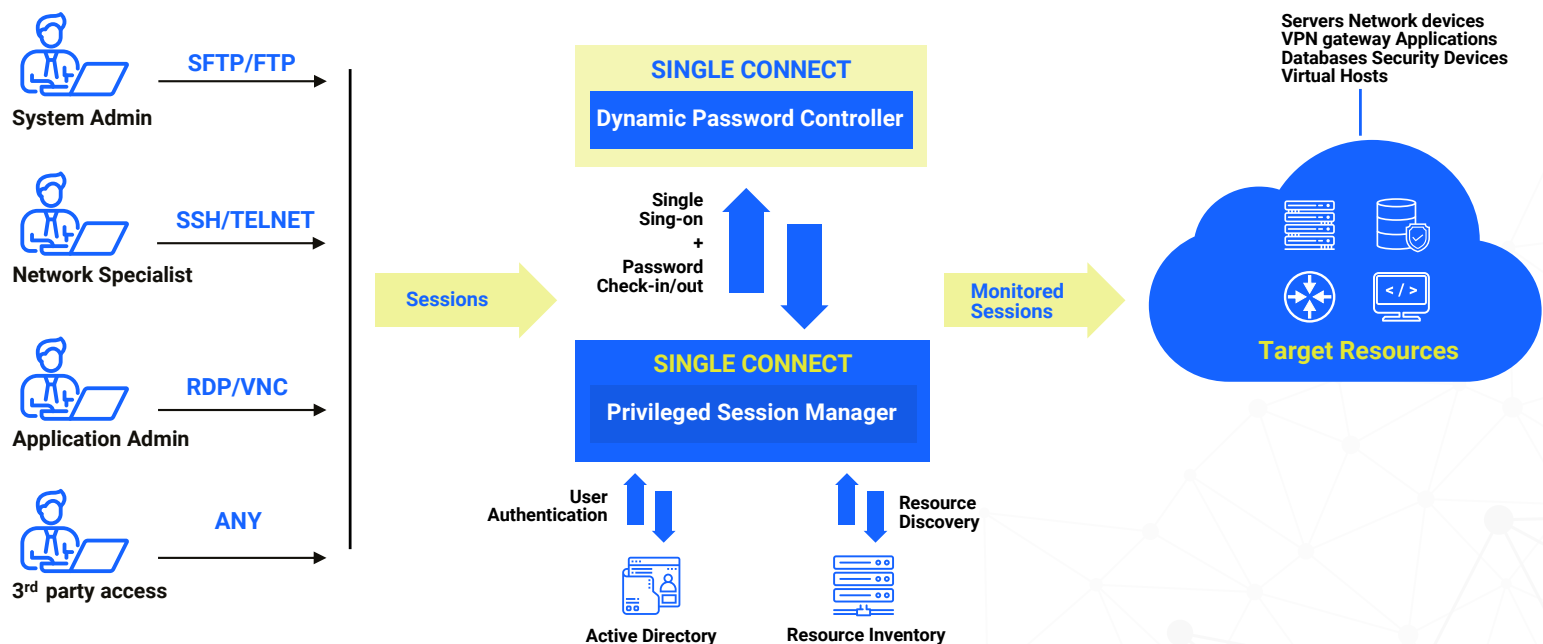
Single Connect Session Manager transparently sits in the middle of sessions and does not require an agent to be installed on User PCs or target servers/applications. Session Manager supports Command Line Interfaces (SSH, Telnet), Remote Desktop Connections (RDP/VNC), Web sessions (HTTP/S), File transfer (SFTP), Database connections (SQL).

#### **Users may choose one the options while connecting the target hosts;**

- ▶ Native clients on their PCs (for CLI, SQL and File Transfer Sessions)
- ▶ Single Connect WEB Portal (CLI and RDP/VNC sessions)
- ▶ Single Connect Desktop Client (CLI and RDP/VNC sessions)

## HOW SESSION MANAGER WORKS

The Privileged Session Manager (PSM) controls, monitors and audits encrypted administrator sessions. The Session Manager runs as a gateway between users and the target end points. The Privileged Session Manager's **man-in-the-middle** approach requires no software agents to be deployed on the target end points and also no specific access portal or client application is required to go through. It is fast to implement and has no impact on end-user experience. Users are authenticated from the existing directory service of the enterprise, and the entire session goes through the **Privileged Session Manager**, therefore, indexed logs, **audit** trails, videos and statistics are logged indisputably. Any custom policy can be easily created on the Privileged Session Manager and can be assigned to user groups to implement the least privilege practices within the enterprise. The **Single Connect** Privileged Session Manager supports a wide range of interfaces including SSH/TELNET for command line interface sessions, RDP/VNC for remote desktop connections and SFTP for file transfer.



**Step 1:** User initiates a session towards Session Manager with his/her own username and password.

**Step 2:** A session between User and Session Manager is established. Session Manager displays the list of devices that the user has permission to access.

**Step 3:** User selects the Target Device he/she wants to connect to from the list.

**Step 4:** Session Manager initiates a session towards the Target Device with a username/password.

**Step 5:** A session is established between Session Manager and the Target Device.

**Step 6:** Two separate sessions (User<->Session Manager and Session Manager<->Target Device) are connected back-to-back by the Session Manager. Single Connect Session Manager is the man-in-the-middle for the entire duration of the session and has "full control" and "full visibility" of the session. In case of a CLI session, when the User enters a command on his/her CLI screen, Session Manager receives it, "processes" it and decides whether to forward the command to the Target Device or reject it.

## FEATURES & BENEFITS

Full visibility. Detailed audit logs. All **commands**, either failed or successful, are logged. Indisputable logging of which user attempted to run which command on which device and when.

Fully comply with regulations provides logs and reports required for **audits** and compliance with regulations.

"Separation of duties" and "least privilege" practices are achieved, regardless of the **role/profile** capabilities of the Target Device. Any custom policies (allowed command sets, blocked command sets) can be defined and applied to any user group, ensuring that only the "required set of commands" can be executed by a user in order to fulfill his tasks, restricting standard user accounts from having over-privileged access.

Context-aware policy. For example, do not allow "delete" command to run at the **device level** (higher/outer level of the command tree), but allow it to run at the port level (lower/inner level of the command tree).

**2-factor authorization.** It is possible to define that certain commands (e.g. shutdown command) require an approval from a second person to run, i.e., when a user enters a "shutdown" command, his supervisor receives an email, and if he/she clicks the "approve" link then the command is executed, otherwise it is rejected.

Eliminates weak passwords and/or **non-expiry** passwords.

**Enables** the definition of time-based access limitations, based on time of day, day of the week, maintenance window hours, etc.

Disables inactive **privileged** accounts and sessions.

Session recording and video playback for forensic **analysis**.

Object Character Recognition for RDP session **recording** - OCR

Dual control (referred to as "four eyes" or "second eye"). When a user is connected to a device, a supervisor can monitor the session in real-time and can also **take/release** the control of the session. This is particularly useful when real time monitoring is required for emergency accounts or to monitor someone who is in training.

Single sign-on. The user connects to **Single Connect** Session Manager with his/her username/password and selects any allowed device to connect. The user does not need to use/know separate username/passwords to connect to different devices/servers.

Auto-login. Single Connect Session Manager enables user to connect enterprise applications without **knowing application** username/password.

Helps to **eliminate password** sharing and shared account usage. Users always log in with their own username/password, even if a shared account is used to connect to the device. For example, I connect to Single Connect with username=Frank and then select a device to connect. Single Connect Session Manager establishes a session towards the target device, but may be using username=admin. As a user, I never see/know the real username/password used to connect to the target device, all I know is my own username/password.

Makes sure it is the **real user** connecting to the target device, indisputably.

Auto lock user account when an employee **terminates** employment (integration with enterprise Active Directory or LDAP is required).

**Auto enable** new user account with correct privileges when a new employee starts work (integration with enterprise Active Directory or LDAP is required).